



FACT SHEET

Missouri Department of Natural Resources



Former Amoco Sugar Creek Refinery Sugar Creek, Missouri

March 1999

INTRODUCTION

The U. S. Environmental Protection Agency (EPA) Region 7 and the Missouri Department of Natural Resources (MDNR) are addressing contamination at the former Amoco Sugar Creek Refinery at 1000 N. Sterling Road in Sugar Creek, Missouri. EPA and MDNR will be conducting community interviews this month and are planning to hold a public meeting in April 1999. Additional information about the public meeting will be available at a later time.

BACKGROUND

Amoco Oil Company operated a petroleum refinery in Sugar Creek, Missouri from approximately 1904 to 1982. In 1981, Amoco began groundwater monitoring and investigation at the facility. Initial sampling at the facility found contamination of soil and groundwater. Several contaminants were found, including benzene, ethylbenzene, toluene, and xylene.

In June 1989, EPA issued a consent order (EPA Consent Order) to Amoco regarding the former refinery. The EPA Consent Order requires Amoco (1) to conduct short term cleanup actions, called Interim Measures, to address potential threats to

human health or the environment; (2) to conduct a comprehensive investigation, called a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), that determines the nature and extent of releases of contaminants from the facility; and (3) to identify and evaluate alternatives for the corrective action necessary to prevent or control migration or releases of contaminants from the facility. Once the corrective actions are selected, they will be incorporated into a permit or an order with MDNR or EPA.

In February 1990, Amoco entered into an Administrative Order on Consent with MDNR that specified procedures and a schedule for closure of former hazardous waste surface impoundments. The former surface impoundments consisted of a sludge pit, sludge pond, and wastewater lagoon located on the northeast portion of the facility.

In October 1997, MDNR assumed the lead from EPA on technical issues regarding the facility. EPA continues to provide oversight and technical assistance to MDNR.

INTERIM MEASURES

Amoco began installation of an interceptor trench network along the southern property

boundary of the refinery in 1967 and has added additional sections over time. The interceptor trench network captures contaminated groundwater for treatment purposes.

Between 1988 and 1995, Amoco has recovered approximately 1.9 million gallons of petroleum hydrocarbons from recovery wells on the facility. Currently, Amoco has a network of recovery wells on-site.

In 1998, Amoco began using an Enhanced Fluid Recovery process to remove petroleum products, contaminated groundwater, and vapors from selected groundwater monitoring wells.

RCRA FACILITY INVESTIGATION

--Groundwater

Amoco has installed 247 groundwater monitoring wells on and around the facility. Samples collected from these wells provide information on groundwater quality and information on possible migration of groundwater contaminants. Results of the groundwater sampling are available at the information repository location.

Groundwater monitoring and investigation has identified groundwater contamination under some residential property near the southwest corner of the refinery.

--Air

In June 1998, Amoco collected air samples from the basements of houses near the facility. These sampling results have been provided to the residents of the homes sampled. The analytical results were reviewed by EPA, MDNR, and the Agency for Toxic Substances and Disease Registry (ATSDR). While low levels of contaminants were detected in some houses, the levels do not appear to present an

immediate health threat. Results were inconclusive as to the source of the contaminants present in the homes, since the compounds are also components of common household products. EPA plans to conduct additional basement air sampling to better define contaminant levels and possible sources, as well as potential health risks due to long term exposure.

CLOSURE ACTIVITIES

Under the requirements of the Administrative Order on Consent agreement with MDNR, Amoco has been using a biotreatment process to treat contaminated soil and sludge in former surface impoundments. The biotreatment process works similarly to a compost pile. By mixing the contaminated sludge and soil with wood chips and microorganisms, the petroleum contaminants are naturally broken down. Treatment of remaining sludge and soil is expected to be completed in March 1999.

CURRENT STATUS

Amoco continues to conduct investigations at the facility to determine the nature and extent of contamination. When this investigation is complete, Amoco, under EPA and MDNR oversight, will evaluate potential cleanup methods and propose a cleanup plan. While this investigation is being completed, EPA and MDNR are evaluating the need for additional Interim Measures. These additional Interim Measures would be in the Norledge Area and along the southern portion of the facility. Amoco will submit a work plan to EPA/MDNR for these Interim Measures in March 1999. The Norledge Area is near the southwest portion of the facility. Amoco will also implement access restrictions around additional portions of the facility. EPA and MDNR will continue to coordinate with other federal and state agencies regarding activities at the facility.

OTHERS INVOLVED:

–Missouri Department of Health

In July 1998, the Missouri Department of Health's (MDOH) Cancer Inquiry Program began a cancer inquiry in response to a request from citizens who live near the refinery. Citizens are concerned about neighborhood health problems, which they suspect may be connected to contamination from the refinery. MDOH is currently conducting research to address these concerns. For more information, contact Marianne Ronan at (573) 876-3268.

–The Agency for Toxic Substances and Disease Registry (ATSDR)

ATSDR was petitioned in June 1998 to evaluate the public health impact of hazardous chemicals at the refinery. ATSDR staff gathered and is reviewing environmental and health outcome data. ATSDR staff met in 1998 with a number of Sugar Creek residents, Amoco employees, and elected officials to gather community health concerns. For more information, contact Denise Jordan-Izaguirre at (913) 551-7692.

--Technical Outreach Services for Communities (TOSC)

The services of the TOSC have been made available at no cost to the community. Consisting of Kansas State University professors and staff, TOSC's goal is to explain technical information to local citizens. Also, TOSC offers support to the community, including preparing written materials and conducting public workshops. For more information, contact Blase Leven at (800) 798-7796.

Information Repository

A copy of the 1995 RCRA Facility Investigation Report and other technical reports concerning the Former Amoco Sugar

Creek Refinery are available at:

Mid-Continent Public Library
15616 E. 24 Hwy.
Independence, MO 64050
(816) 836-5200

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